

10696478

=> d his

(FILE 'HOME' ENTERED AT 11:56:01 ON 12 MAY 2004)

FILE 'REGISTRY' ENTERED AT 11:56:13 ON 12 MAY 2004

L1 STRUCTURE uploaded

L2 0 S L1

L3 16 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 11:57:11 ON 12 MAY 2004

L4 2 S L3

FILE 'REGISTRY' ENTERED AT 12:34:25 ON 12 MAY 2004

L5 STRUCTURE uploaded

L6 1 S L5

L7 18 S L5 SSS FULL

L8 2 S L7 NOT L3

FILE 'CAPLUS' ENTERED AT 12:35:33 ON 12 MAY 2004

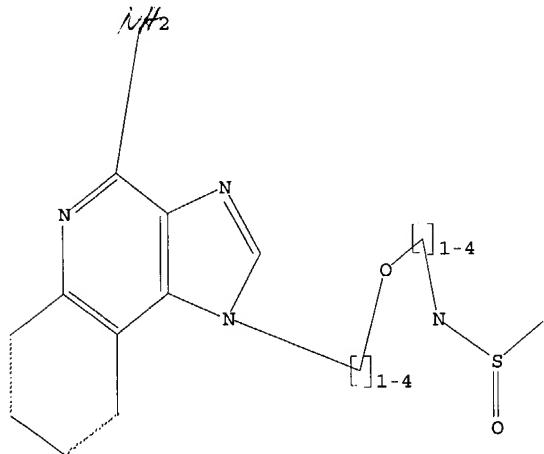
L9 2 S L8

L10 0 S L9 NOT L4

=> d 11

L1 HAS NO ANSWERS

L1 STR

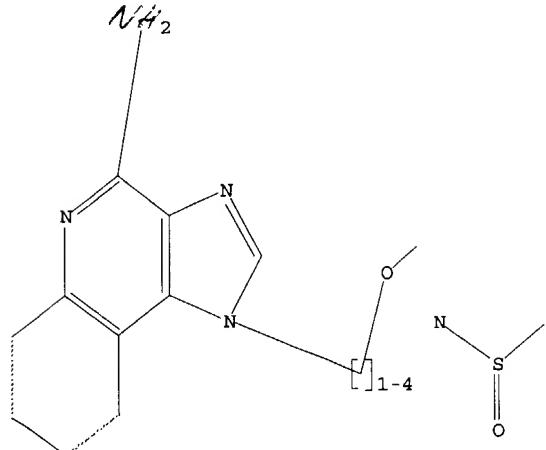


Structure attributes must be viewed using STN Express query preparation.

=> d 15

L5 HAS NO ANSWERS

L5 STR



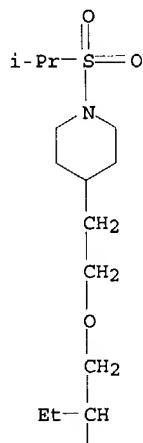
10696478

Structure attributes must be viewed using STN Express query preparation.

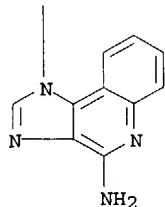
=> d scan 18
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:Y

L8 2 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-1-[(1-methylethyl)sulfonyl]- (9CI)
MF C24 H35 N5 O3 S

PAGE 1-A



PAGE 2-A



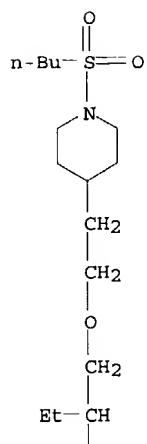
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) :1

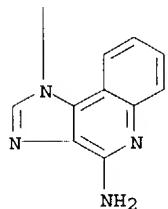
L8 2 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-1-(butylsulfonyl)- (9CI)
MF C25 H37 N5 O3 S

10696478

PAGE 1-A



PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10696478

=> d his

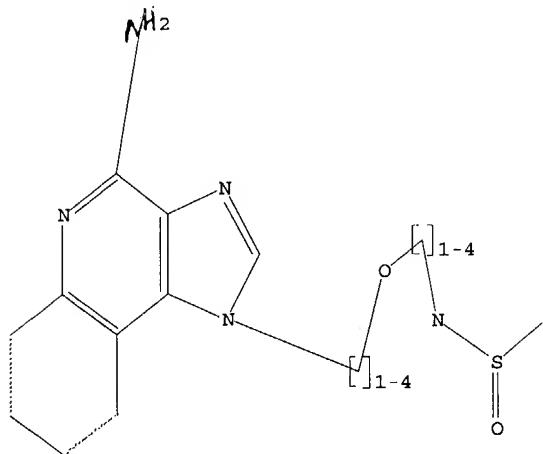
(FILE 'HOME' ENTERED AT 11:56:01 ON 12 MAY 2004)

FILE 'REGISTRY' ENTERED AT 11:56:13 ON 12 MAY 2004
L1 STRUCTURE UPLOADED

L2 0 S L1
L3 16 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 11:57:11 ON 12 MAY 2004
L4 2 S L3

=> d l1
L1 HAS NO ANSWERS
L1 STR

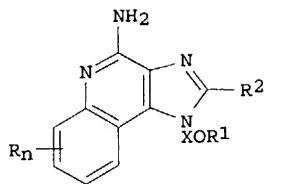


Structure attributes must be viewed using STN Express query preparation.

=> d 1-2 bib abs hitstr

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:570648 CAPLUS
DN 139:133563
TI Preparation of sulfonamidoalkoxyalkylimidazoquinolines as immune response modulators.
IN Crooks, Stephen L.; Griesgraber, George W.; Heppner, Philip D.; Merrill, Bryan A.; Roberts, Ralph R.; Wei, Ai-Ping
PA 3M Innovative Properties Co., USA
SO U.S. Pat. Appl. Publ., 46 pp., Cont.-in-part of U.S. Ser. No. 12,599.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 11
PATENT NO. KIND DATE APPLICATION NO. DATE

PI US 2003139441 A1 20030724 US 2002-165443 20020607
US 6677347 B2 20040113
US 2002193396 A1 20021219 US 2001-12599 20011201
US 6683088 B2 20040127
US 2004072858 A1 20040415 US 2003-675833 20030930
PRAI US 2000-254218P P 20001208
US 2001-12599 A2 20011201
US 2001-11921 A1 20011206
OS MARPAT 139:133563
GI



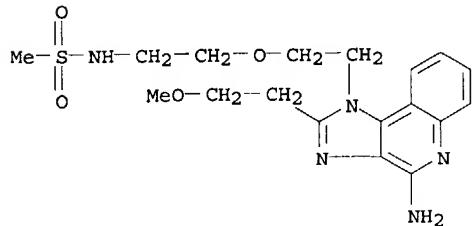
AB Title compds. [I; X = CHR5, CHR5, CHR5, R1 = R4NR3SO2R6A, R4NR3SOR7, R4NR3SO2NR5R6A, R4NR3SO2NH2; A = alkyl, alkenyl, aryl, heteroaryl, heterocycl; R2 = H, (substituted) alkyl, alkenyl, aryl, heteroaryl, heterocycl, alkyl-Y-alkyl, alkyl-Y-alkenyl, alkyl-Y-aryl; Y = O, S(O)0-2; R3 = H, alkyl, arylalkyl; R4 = alkyl, alkenyl, which may be interrupted by ≥ 1 O; R3R4 form a ring; R5 = H, alkyl, alkenyl; R6 = bond, alkyl, alkenyl, which may be interrupted by ≥ 1 O; R7 = alkyl; R3R7 form a ring; n = 0-4; R = alkyl, alkoxy, OH, halo, CF3], were prepared Thus, tert-Bu 2-[2-[(3-aminoquinolin-4-yl)amino]ethoxy]ethylcarbamate (preparation given) in CH2Cl2 was cooled to 0° and treated with Et3N and methoxypropionyl chloride; The reaction was then warmed to room temperature and stirring was continued for 1 h to give tert-Bu 2-[2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxyethylcarbamate. This was converted to N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxyethyl]methanesulfonamide in several steps. I showed interferon induction in human cells with lowest effective concns. of 0.0001-1 μ M.

IT 437382-50-8P, N-[2-[2-[4-Amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxyethyl]methanesulfonamide 437382-51-9P, N-[2-[2-[4-Amino-2-(2-methoxyethyl)-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl]ethoxyethyl]methanesulfonamide 437382-52-0P, N-[2-[2-[4-Amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxyethyl]-N-methylmethanesulfonamide 437382-53-1P, N-[2-[2-[4-Amino-2-(2-methoxyethyl)-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl]ethoxyethyl]-N-methylmethanesulfonamide 437382-55-3P 437382-56-4P 437382-58-6P 437382-61-1P 437382-75-7P 437382-89-3P 565454-55-9P 565454-56-0P 565454-57-1P 565454-58-2P 565454-59-3P 565454-60-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of sulfonamidoalkoxyalkylimidazoquinolines as immune response modulators)

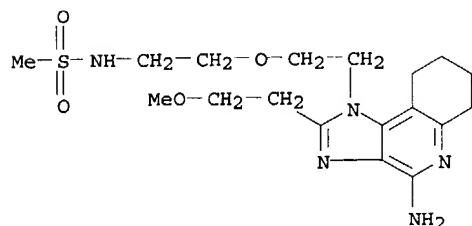
RN 437382-50-8 CAPLUS

CN Methanesulfonamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxyethyl]- (9CI) (CA INDEX NAME)



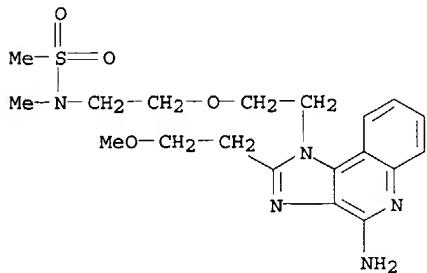
RN 437382-51-9 CAPLUS

CN Methanesulfonamide, N-[2-[2-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxyethyl]- (9CI) (CA INDEX NAME)

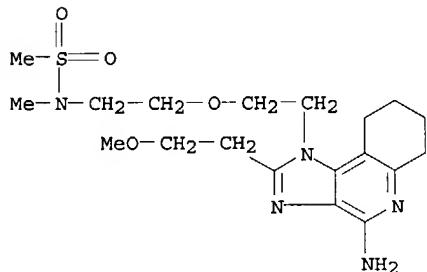


10696478

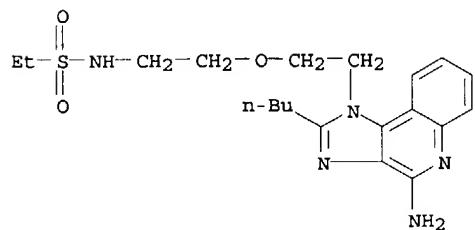
RN 437382-52-0 CAPLUS
CN Methanesulfonamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methyl- (9CI) (CA INDEX NAME)



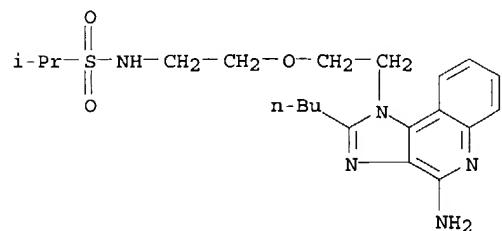
RN 437382-53-1 CAPLUS
CN Methanesulfonamide, N-[2-[2-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methyl- (9CI) (CA INDEX NAME)



RN 437382-55-3 CAPLUS
CN Ethanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)

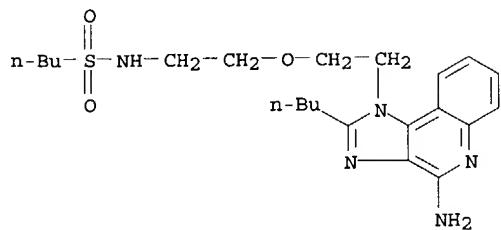


RN 437382-56-4 CAPLUS
CN 2-Propanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)

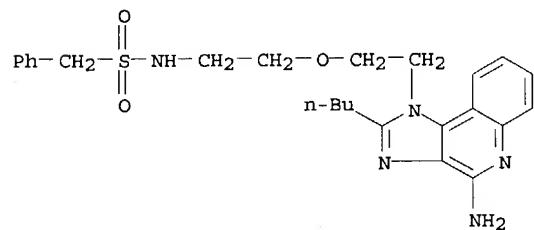


10696478

RN 437382-58-6 CAPLUS
CN 1-Butanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl] - (9CI) (CA INDEX NAME)

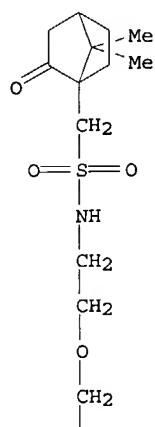


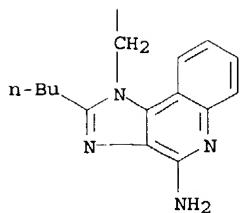
RN 437382-61-1 CAPLUS
CN Benzenemethanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl] - (9CI) (CA INDEX NAME)



RN 437382-75-7 CAPLUS
CN Bicyclo[2.2.1]heptane-1-methanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]-7,7-dimethyl-2-oxo-, (1S,4R)- (9CI) (CA INDEX NAME)

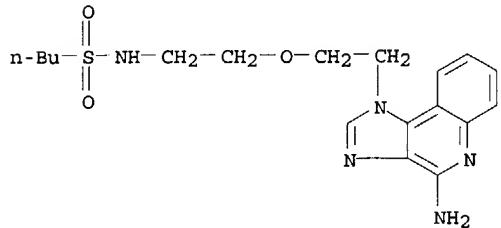
PAGE 1-A





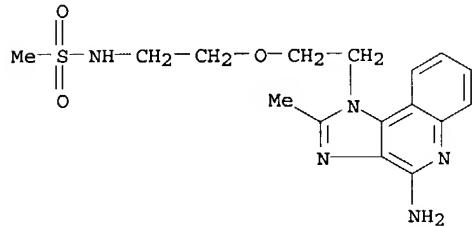
RN 437382-89-3 CAPLUS

CN 1-Butanesulfonamide, N-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



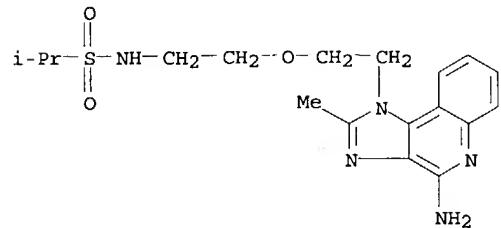
RN 565454-55-9 CAPLUS

CN Methanesulfonamide, N-[2-[2-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



RN 565454-56-0 CAPLUS

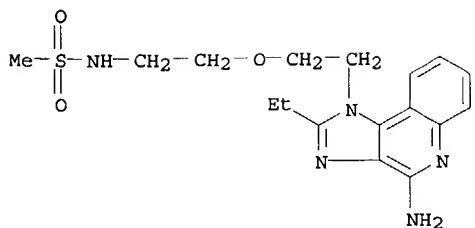
CN 2-Propanesulfonamide, N-[2-[2-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



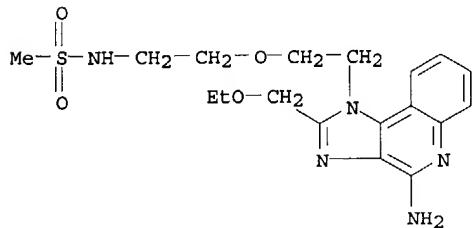
RN 565454-57-1 CAPLUS

CN Methanesulfonamide, N-[2-[2-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)

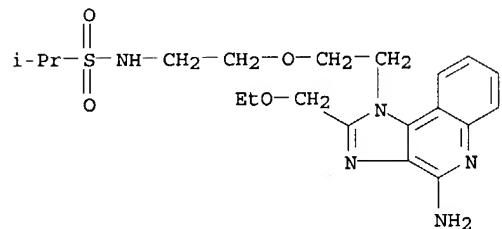
10696478



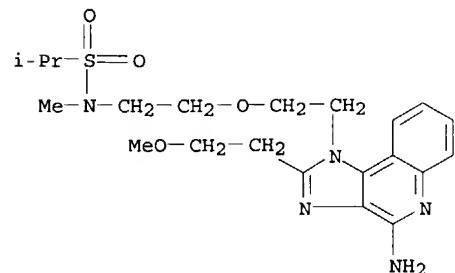
RN 565454-58-2 CAPLUS
CN Methanesulfonamide, N-[2-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl] - (9CI) (CA INDEX NAME)



RN 565454-59-3 CAPLUS
CN 2-Propanesulfonamide, N-[2-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl] - (9CI) (CA INDEX NAME)



RN 565454-60-6 CAPLUS
CN 2-Propanesulfonamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methyl- (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:449681 CAPLUS
DN 137:33297
TI Preparation of sulfonamido ether substituted imidazoquinolines as immune response modifiers
IN Crooks, Stephen L.; Greisgraber, George W.; Heppner, Philip D.; Merrill, Bryon A.; Roberts, Ralph R.; Wei, Ai-Ping
PA 3M Innovative Properties Company, USA

10696478

SO PCT Int. Appl., 74 pp.

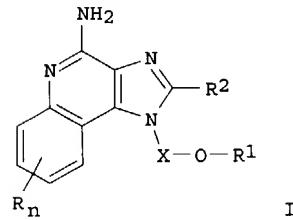
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002046190	A2	20020613	WO 2001-US46582	20011206
	WO 2002046190	A3	20030717		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002039517	A5	20020618	AU 2002-39517	20011206
	US 2003065005	A1	20030403	US 2001-11921	20011206
	US 6664260	B2	20031216		
	EP 1341790	A2	20030910	EP 2001-987283	20011206
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	EE 200300274	A	20031015	EE 2003-274	20011206
	NO 2003002473	A	20030530	NO 2003-2473	20030530
	US 2004072858	A1	20040415	US 2003-675833	20030930
PRAI	US 2000-254218P	P	20001208		
	US 2001-11921	A1	20011206		
	WO 2001-US46582	W	20011206		
OS	MARPAT	137:33297			
GI					



AB The title compds. {I; X = (CH₂)₂, (CH₂)₃, CHEtCH₂, etc.; R₁ = R₄NR₃SO₂R₆alkyl, R₄NR₃SO₂R₆aryl, etc.; R₂ = H, alkyl, alkenyl, etc.; R₃ = H, alkyl, aralkyl; R₄ = alkylene or alkenylene interrupted by one or more O atoms; or R₃R₄ can join together to form a ring; R₆ = a bond, alkylene or alkenylene which may be interrupted by one or more O atoms; n = 0-4; R = alkyl, alkoxy, OH, etc.] that contain substituted amine functionality at the 1-position, and are useful as immune response modifiers, were prepared E.g., a multi-step synthesis of I [X = (CH₂)₂; R₁ = (CH₂)₂NMe₂SO₂Me; R₂ = (CH₂)₂OMe; n = 0] which showed the lowest concentration of 0.01 μ M and 0.12 μ M to induce interferon α and TNF α , resp., was given. The compds. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

IT 437382-50-8P 437382-51-9P 437382-52-0P
437382-53-1P 437382-55-3P 437382-56-4P
437382-58-6P 437382-61-1P 437382-75-7P
437382-89-3P

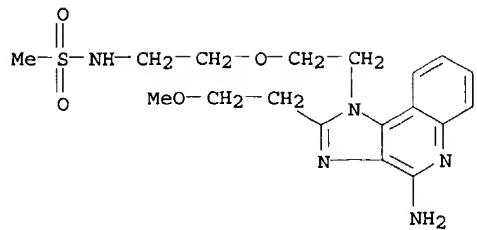
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of sulfonamido ether substituted imidazoquinolines as immune response modifiers)

RN 437382-50-8 CAPLUS

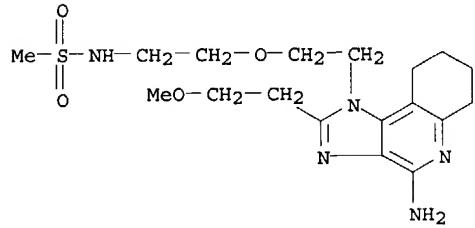
CN Methanesulfonamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl] - (9CI) (CA INDEX NAME)

10696478



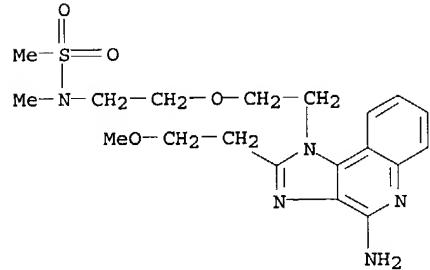
RN 437382-51-9 CAPLUS

CN Methanesulfonamide, N-[2-[2-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl] - (9CI) (CA INDEX NAME)



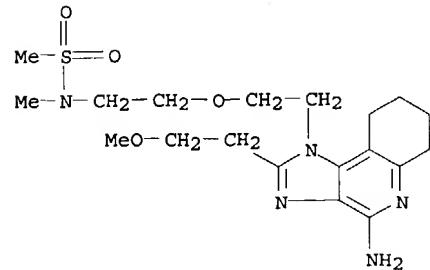
RN 437382-52-0 CAPLUS

CN Methanesulfonamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methyl- (9CI) (CA INDEX NAME)



RN 437382-53-1 CAPLUS

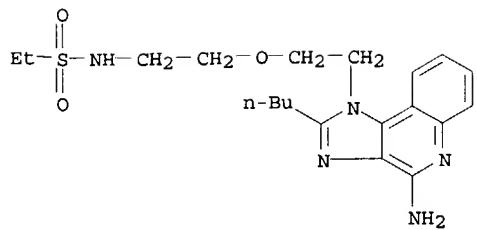
CN Methanesulfonamide, N-[2-[2-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methyl- (9CI) (CA INDEX NAME)



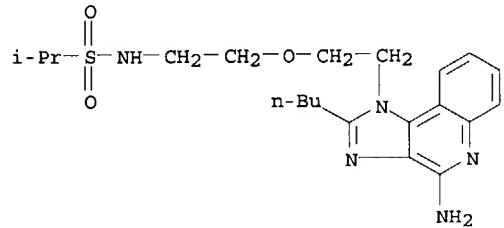
RN 437382-55-3 CAPLUS

CN Ethanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl] - (9CI) (CA INDEX NAME)

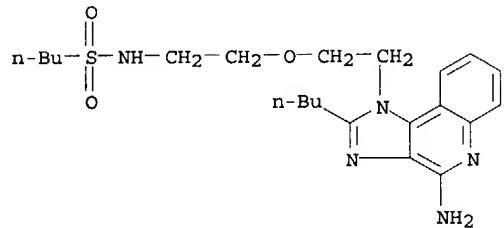
10696478



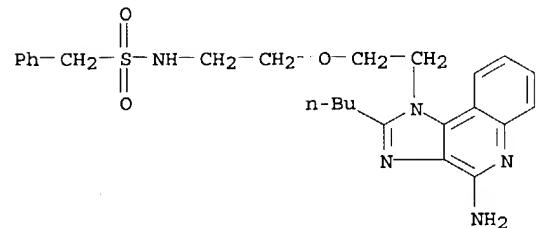
RN 437382-56-4 CAPLUS
CN 2-Propanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl] - (9CI) (CA INDEX NAME)



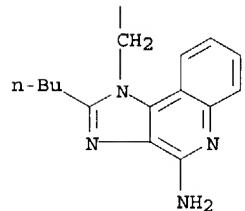
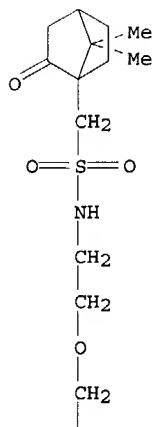
RN 437382-58-6 CAPLUS
CN 1-Butanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl] - (9CI) (CA INDEX NAME)



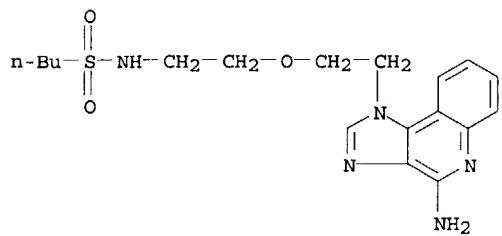
RN 437382-61-1 CAPLUS
CN Benzenemethanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl] - (9CI) (CA INDEX NAME)



RN 437382-75-7 CAPLUS
CN Bicyclo[2.2.1]heptane-1-methanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]-7,7-dimethyl-2-oxo-, (1S,4R)- (9CI) (CA INDEX NAME)



RN 437382-89-3 CAPLUS
 CN 1-Butanesulfonamide, N-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



=>